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FIGURE 1

GCTCTCCCTGCTCTAGCAAGGACCATGAGGGCGCTGGAGGGGCCAGGCCTGTGCTGCTG
M R A L E G P G L S L L
 TGCCTGGTGTGGCGCTGCCTGCCCTGCTGCCGGTGGCGGCTGTACGGGAGTGGCAGAA
C L V L A L P A L L P V P A V R G V A E
 ACACCCACCTACCCCTGGCGGGACGCAGAGACAGGGGAGCGGCTGGTGTGCGCCCACTGC
 T P T Y P W R D A E T G E R L V C A Q C
 CCCCCAGGCACCTTTGTGCAGCGGCCGTGCCGCCGAGACAGCCCCACGACGTGTGGCCCG
 P P G T F V Q R P C R R D S P T T C G P
 TGTCCACCGCGCCACTACACGCAGTTCTGGAACCTACCTGGAGCGCTGCCGCTACTGCAAC
 C P P R H Y T Q F W N Y L E R C R Y C N
 GTCCTCTGCGGGGAGCGTGAGGAGGAGGCACGGGCTTGCCACGCCACCCACAACCGTGCC
 V L C G E R E E E A R A C H A T H N R A
 TGCCGCTGCCGCACCGGCTTCTTCGCGCACGCTGGTTTCTGCTTGGAGCACGCATCGTGT
 C R C R T G F F A H A G F C L E H A S C
 CCACCTGGTGGCGGCGTGATTGCCCGGGGACCCCCAGCCAGAACACGCAGTGCCAGCCG
 P P G A G V I A P G T P S Q N T Q C Q P
 TGCCCCCAGGCACCTTCTCAGCCAGCAGCTCCAGCTCAGAGCAGTGCCAGCCCCACCGC
 C P P G T F S A S S S S S S E Q C Q P H R
 AACTGCACGGCCCTGGGCGCTGGCCCTCAATGTGCCAGGCTCTTCTCCCATGACACCCTG
 N C T A L G L A L N V P G S S S S H D T L
 TGCACCAGCTGCACTGGCTTCCCCCTCAGCACCAGGGTACCAGGAGCTGAGGAGTGTGAG
 C T S C T G F P L S T R V P G A E E C E
 CGTGCCGTCATCGACTTTGTGGCTTTCCAGGACATCTCCATCAAGAGGCTGCAGCGGCTG
 R A V I D F V A F Q D I S I K R L Q R L
 CTGCAGGCCCTCGAGGCCCCGGAGGGCTGGGGTCCGACACCAAGGGCGGGCCGCGCGGCC
 L Q A L E A P E G W G F T P R A G R A A
 TTGCAGCTGAAGCTGCGTGGCGGCTCACGGAGCTCCTGGGGGCGCAGGACGGGGCGCTG
 L Q L K L R R R L T E L L G A Q D G A L
 CTGGTGGCGCTGCTGCAGGCGCTGCCGCTGGCCAGGATGCCCGGGCTGGAGCGGAGCGTC
 L V R L L Q A L R V A R M P G L E R S V
 CGTGAGCGCTTCTCCCTGTGCACTGATCCTGGCCCCCTCTTATTATTCTACATCCTTG
 R E R F L P V H *
 GCACCCCACTTGCACTGAAAGAGGCTTTTTTTTAAATAGAAGAAATGAGGTTTCTTAAAG
 CTTATTTTATAAAGCTTTTTCATAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

FIGURE 2

TGGCATGTCCGGTCAGGCACAGCAGGGTCCTGTGTCCGGCTGAGCCGGCTCTCCCTGCT
 CCAGCAAGGACCATGAGGGCCCTGGAGGGGCCAGGCCTGTGCTGTGCTGCTGGTGTG
M R A L E G P G L S L L C L V L
 GCGCTGCCCTGCCCTGCTGCCGGTGGCCGGCTGTACGGGGAGTGGCAGAAACACCCACCTAC
A L P A L L P V P A V R G V A E T P T Y
 CCCTGGCGGGACGCAGAGACAGGGGAGCGGCTGGTGTGCGCCAGTGCACCCAGGCACC
 P W R D A E T G E R L V C A Q C P P G T
 TTTGTGCAGCGGCCGTGCCGCCGAGACAGCCCCACGACGTGTGGCCCGTGTCCACCGCGC
 F V Q R P C R R D S P T T C G P C P P R
 CACTACACGCAGTTCTGGAACCTGAGAGCGCTGCCGCTACTGCAACGTCTCTGCGGG
 H Y T Q F W N Y L E R C R Y C N V L C G
 GAGCGTGAGGAGGAGGCACGGGCTTGCCACGCCACCCACAACCGTGCCTGCCGCTGCCGC
 E R E E E A R A C H A T H N R A C R C R
 ACCGGCTTCTTCGCGCACGCTGGTTTCTGCTTGGAGCACGCATCGTGTCCACCTGGTGGC
 T G F F A H A G F C L E H A S C P P G A
 GCGGTGATTGCCCCGGGTGAGAGCTGGGCGAGGGGAGGGGCCCCCAGGAGTGGTGGCCGG
 G V I A P G E S W A R G G A P R S G G R
 AGGTGTGGCAGGGGTGAGTTGCTGGTCCCAGCCTTGACCCCTGAGCTAGGACACCAATT
 R C G R G Q V A G P S L A P *
 CCCCTGACCCTGTTCTTCCCTCCTGGCTGCAGGCACCCCCAGCCAGAACACGCAGTGCCA
 GCCGTGCCCCCAGGCACCTTCTCAGCCAGCAGCTCCAGCTCAGAGCAGTGCCAGCCCCA
 CCGCAACTGCACGGCCCTGGGCCTGGCCCTCAATGTGCCAGGCTCTTCTCCCATGACAC
 CCTGTGCACCAGCTGCACTGGCTTCCCCCTCAGCACCAGGGTACCAGGTGAGCCAGAGGC
 CTGAGGGGGCAGCACACTGCAGGCCAGGCCCACTGTGCCCCCTACTCCTGCCCCCTGCACG
 TGCATCTAGCCTGAGGCATGCCAGCTGGCTCTGGGAAGGGGCCACAGTGGATTGAGGGG
 TCAGGGGTCCCTCCACTAGATCCCCACCAAGTCTGCCCTCTCAGGGGTGGCTGAGAATTT
 GGATCTGAGCCAGGGCACAGCCTCCCCCTGGAGAGCTCTGGGAAAGTGGGCAGCAATCTCC

FIGURE 2 (continued)

TAACTGCCCCGAGGGGAAGGTGGCTGGCTCCTCTGACACGGGGAAACCGAGGCCTGATGGT
AACTCTCCTAACTGCCCTGAGAGGAAGGTGGCTGCCCTCCTCTGACATGGGGAAACCGAGGC
CCAATGTTAACCCTGTTGAGAAGTCACAGGGGGAAGTGACCCCTTAACATCAAGTCAG
GTCCGGTCCATCTGCAGGTCCCAACTCGCCCTTCCGATGGCCCAGGAGCCCCAAGCCCT
TGCTTGGGCCCCCTTGCTCTTGACGCCAAGGTCCGAGTGGCCGCTCCTGCCCCCTAGGC
CTTTGCTCCAGCTCTCTGACCGAAGGCTCCTGCCCCCTTCTCCAGTCCCCATCGTTGCACT
GCCCTCTCCAGCACGGCTCACTGCACAGGGATTTCTCTCTCCTGCAAACCCCCCGAGTGG
GGCCCAGAAAGCAGGGTACCTGGCAGCCCCCGCCAGTGTGTGTGGGTGAAATGATCGGAC
CGCTGCCTCCCCACCCCACTGCAGGAGCTGAGGAGTGTGAGCGTGCCGTCATCGACTTTG
TGGCTTTCAGGACATCTCCATCAAGAGGAGCGGCTGCTGCAGGCCC

Case	Time	Location	Weather	Wind	Temp	Humidity	Pressure	Clouds	Visibility	Remarks
1	0800	10°N 105°E	Partly Cloudy	10 kts	28.5	75%	1010	1000	10	First sighting of the ship
2	0900	10°N 105°E	Partly Cloudy	10 kts	28.5	75%	1010	1000	10	Ship moving towards the east
3	1000	10°N 105°E	Partly Cloudy	10 kts	28.5	75%	1010	1000	10	Ship moving towards the east
4	1100	10°N 105°E	Partly Cloudy	10 kts	28.5	75%	1010	1000	10	Ship moving towards the east
5	1200	10°N 105°E	Partly Cloudy	10 kts	28.5	75%	1010	1000	10	Ship moving towards the east
6	1300	10°N 105°E	Partly Cloudy	10 kts	28.5	75%	1010	1000	10	Ship moving towards the east
7	1400	10°N 105°E	Partly Cloudy	10 kts	28.5	75%	1010	1000	10	Ship moving towards the east
8	1500	10°N 105°E	Partly Cloudy	10 kts	28.5	75%	1010	1000	10	Ship moving towards the east
9	1600	10°N 105°E	Partly Cloudy	10 kts	28.5	75%	1010	1000	10	Ship moving towards the east
10	1700	10°N 105°E	Partly Cloudy	10 kts	28.5	75%	1010	1000	10	Ship moving towards the east
11	1800	10°N 105°E	Partly Cloudy	10 kts	28.5	75%	1010	1000	10	Ship moving towards the east
12	1900	10°N 105°E	Partly Cloudy	10 kts	28.5	75%	1010	1000	10	Ship moving towards the east
13	2000	10°N 105°E	Partly Cloudy	10 kts	28.5	75%	1010	1000	10	Ship moving towards the east
14	2100	10°N 105°E	Partly Cloudy	10 kts	28.5	75%	1010	1000	10	Ship moving towards the east
15	2200	10°N 105°E	Partly Cloudy	10 kts	28.5	75%	1010	1000	10	Ship moving towards the east
16	2300	10°N 105°E	Partly Cloudy	10 kts	28.5	75%	1010	1000	10	Ship moving towards the east
17	0000	10°N 105°E	Partly Cloudy	10 kts	28.5	75%	1010	1000	10	Ship moving towards the east
18	0100	10°N 105°E	Partly Cloudy	10 kts	28.5	75%	1010	1000	10	Ship moving towards the east
19	0200	10°N 105°E	Partly Cloudy	10 kts	28.5	75%	1010	1000	10	Ship moving towards the east
20	0300	10°N 105°E	Partly Cloudy	10 kts	28.5	75%	1010	1000	10	Ship moving towards the east
21	0400	10°N 105°E	Partly Cloudy	10 kts	28.5	75%	1010	1000	10	Ship moving towards the east
22	0500	10°N 105°E	Partly Cloudy	10 kts	28.5	75%	1010	1000	10	Ship moving towards the east
23	0600	10°N 105°E	Partly Cloudy	10 kts	28.5	75%	1010	1000	10	Ship moving towards the east
24	0700	10°N 105°E	Partly Cloudy	10 kts	28.5	75%	1010	1000	10	Ship moving towards the east

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[illegible]

264 TKPLAHPSPSTTPOFTTLOSPVMSSTFTSSSTYTTPOD TERN
 265 LQREAHVPHLPA-DKARUTQPEQQHLLITA- TERN
 266 LNKQGAHSHREY-NQTFPHSEKHLHSDSISVD NER
 267 PBOESPPCEA-PRADPHFPDLAEPL- LHA
 268 SPTLHSE-TVAINSDDVLSKYIT- FS
 269 TTFEAPPHUQHDCMPTDE-HQAPASTPTQSLVDSQA CMO
 270 PANKAPHPKQE-PQ-HINFPD- CMO
 271 TGOGPSTREY-E-VHOGRAVAAILGLL- CMO
 272 LNFICM-NES-SFKQ-LTK- VZ1
 273 LNPICM-NES-SFKQ-LTK- CFB
 274 LQRLQALDEAD-OM-ON- TERN-6a
 275 LQRLQALDEAD-E-SWARGO- TERN-6b
 276

277 CPTFAAARRVAPPYQNDPILATA- TERN
 278 SSSSSSSSSSSSSAL- TERN
 279 SGLHDDQPHQTASQQLK- ODOGLYSSLPKAREE NER
 280 HSDLSPPAGPT- LHA
 281 ARTLSTHPPONSCHSDPI-ALVIFSONFLVFTLA C07
 282 SKTLPIMASAPVABSTOKPVLDAOPVILVLVVVO CMO
 283 DLOSHVAPV- CMO
 284 ABTSTALLPL-LPFLTLRFSVVKR 4-JB
 285 VLOLL-OPLAILLALLLRDQ CMO
 286 AKNDGO-H- VZ1
 287 TKNDDBSI- CFB
 288 AAOAAALQLK-L- TERN-6a
 289 HRSO- TERN-6b
 290

291 LASDPIPHPLQKWDSSANKPQSLDTPDPATLYAVVE TERN
 292 DRMAPTRNQPAPOVBASGACARASTOSSDSS TERN
 293 VEKLL- HOS NER
 294 APSESVVLOQSP- VQAREL-EAS LHA
 295 HTLSQV- FS
 296 OALFL- HQ C07
 297 SAFPLLCHRRACRKRIRQKLHLCIPVQTSQPALELYDSRP CMO
 298 QSTL- CMO
 299 ORKLL- 4-JB
 300 HSHSETVTLADCLSSVDIYLYSNTN VZ1
 301 NPHESEVTLVODCLSSVDIYLYSNTN CFB
 302 RRLTELLOAQDQALLVRLQALR- TERN-6a
 303 RRLTELLOAQDQALLVRLQALR- TERN-6b
 304

FIGURE 3 (continued)

365 NVPPLRMKSTVRRRLQCLSDHEIDRLQLQORCLREAOYSHL TFRU
 372 PGOHQTQVNVTCIVHXCSSSDH-SSQSSQASSTHODT-- TFRU
 379 AGDTWRHLAQLGLOPHEHIDFTHEACFVR--ALLNER
 377 POENHQAQANGIHNTGOSVTOTHIYHOPVLGOT--LHR
 376 ---KOPVRKNGHNEAKIDEIKNDNVQDTAEQXVQLL NS
 374 ---RKVRSEKQOESPVPSPCRYSYCP--CXI
 441 RRSSTQLREASUTEPVAREHOLHSQLHETCHSVQAAYL CDO
 256 ---HGCQPV--
 222 ---
 215 ---RLPPD-AHXPPGGOSE-
 308 AQDYESTDTISYHVGHVLDTQSEHMPSCNHNK--VCZ
 311 TQDYETDTISYHVGHVLDTQSEHMPSCNHNK--CHH
 282 ---UARNHPPGLER-- TFR-6a
 153 ---GRRCCRAQ-- TFR-6b

403 ATVRNATPRREATLELLQNVLRNDLLOC-- TFRU
 1 ---DSBPBS-PKDE--QVPPXSECAP-- TFRU
 365 ASHATQDSATLDA--
 379 RNMHQLHQRKA-YDTLXKDLKRNH--CTLASKIQ-- NS
 219 ---ESRQSTI--
 401 ESLPLQDASPAQO-PESPADLPBPVSTENTHMKISKIYI CDO
 263 ---
 221 ---
 200 ---
 319 ---
 342 ---LITNSN8QY-- CHH
 291 --- TFR-6a
 163 --- TFR-6b

404 ---LEBXBAUCOPAAP-- TFRU
 401 ---
 401 ---
 396 ---
 312 ---TILKIDTED-SENHFR--
 216 ---
 500 HKADTVIVGTVAELPEORGLACPAPELESELEADHTPH CDO
 280 ---
 315 ---
 351 ---PTNP-- CHH
 291 ---SVNER TFR-6a
 163 ---VAOPS TFR-6b

(continued)



(continued)

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FIGURE 4

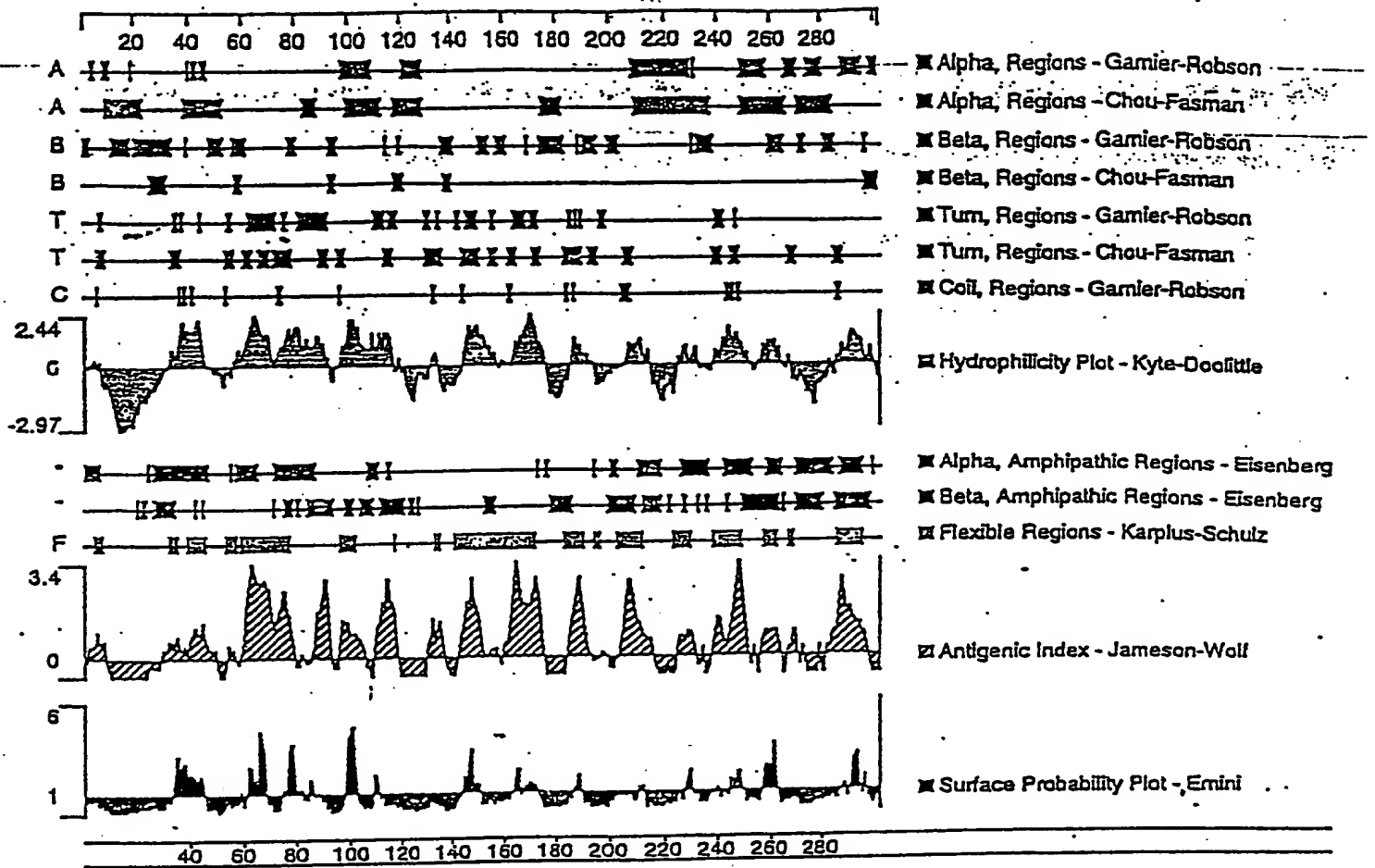
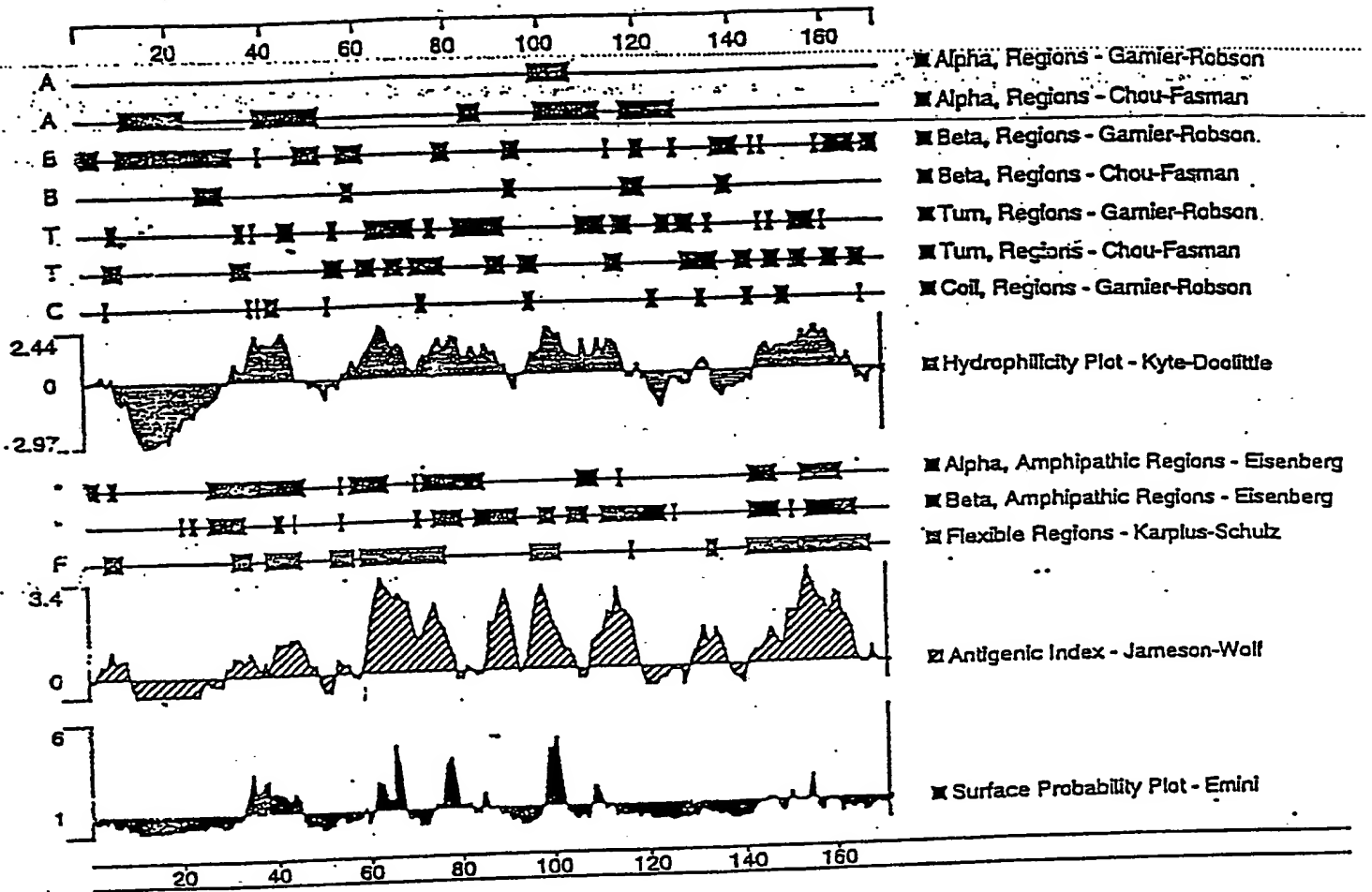


FIGURE 5



HELDI06R
 GGCACGAGCA GGGTCCTGTG TCCGCCCTGA GCCGCGCTCT NCCTGCTCCA GCAAGGACCA
 TGAGGGCGCT GGAGGGGCCA GGCCTGTGCG TGCTGTGCCT GGTGTGGCG CTGCCTGCCC
 TGCTGCCGGT GCCGGCTGTA CGCGGAGTGG CAGAAACACN NACNTACCCC TGGCGGAGC
 NAGAGACAGG GGAGCGGCTG GTGINTNCCC ANTGCCCCC AGGCACCTTT NTGCAGCGGC
 GTGCGCGNCG AGACAGCCCC ACGACGTGTG GCCCGTNTCC ACCGCGCCAC TACACGCATT
 CTGGAACCTAC CTGGAGCGCT GNCGTACTN CAACGTCTCT TCGGGGAGC GTNAGGAGGA
 GGCACGGGTT TNCCACGNCA ACCACAACCG NGGNTTACCG TNGCCGNACC GGTTCCTCG
 NGGCAAGTTG GTTTTNTNTT TGGAGNAGG ATTCGTGTIN CAATTNATTG ACGNAGTGAT
 TNNNCNCGG AACTNAAA

HCEOW38R
 CGCAACTGCA CGGCCCTGGG ACTGGCCCTC AATGTGCCAG GNTCTTCCTC CCATGACACC
 CTGTGCACCA GCTGCACTGG CTCCCCCTC AGCACCAGG TACCANGAGC TGAGGAGTGT
 GAGCNTGCCG TCATCGACTT TTTGGCTTC CAGGACATCT CCATCAAGAG GCTGCAGCGG
 CTGCTCANGC C

Fig. 7A

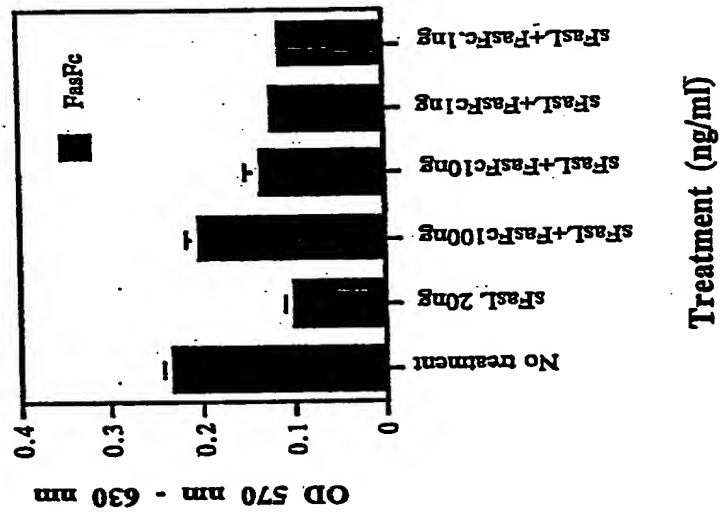


FIGURE 7